

Work Order ID 133269

Friday, May 29, 2015 11:23:56 AM

133269

Page 1

Item ID: DSI 9410-011 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Amends Installations Of D350-591-311/312 Steps
 Start Date: 6/15/15 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 7/03/15 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: MA Date: 15.5.29 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start ***NR1***
 Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9410	B								
100	Document Control	0.00							
100									
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile &type labels per PPP DSI 9410-011								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									
120	QC4- 100% Inspect kits for completeness	0.00							
120									
QC	Memo	0.00							
Quality Control									

DAS
6
9-89 / 4
JUN 11 2015

4X DAS
27
9-89
JUN 10 2015

4
DAS
6
9-89
JUN 11 2015

ML5 1506-10
(4)

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																								
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Work Order ID 133269

Friday, May 29, 2015 11:23:56 AM

133269

Page 2

Item ID: DSI 9410-011 Accept ***N900040100*** Setup Start ***NS1***
Revision ID:
Item Name: Amends Installations Of D350-591-311/312 Steps Stop ***NS2***
Start Date: 6/15/15 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 7/03/15 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

0.00

130

Packaging

Memo

0.00

Identify and pack for shipping as per PPP DSI 9410-011

Location: **F6123**

PPP rev: _____

JUN 11 2015

DAS
6
9-89

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

ML5

JUN 11 2015

ML5

JUN 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
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Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____						
Misidentified ☐	☐	Past Due ☐							

Picklist Print

Friday, May 29, 2015 11:24:01 AM

Page 1

Work Order ID: 133269

133269

Parent Item: DSI 9410-011

DSI 9410-011

Parent Item Name: Amends Installations Of D350-591-311/312 Steps

Start Date: 6/15/15

Required Date: 7/03/15

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP RevA: New issue DD verified by:EC IPP rev:B as per dwg RevB
DD 10.03.03 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-15A *AN4-15A* Bolt		Purchased	No			110	Each	330.0000	8	32		DAS 27 9-89	DAS 02 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		38							
				120449		38							
				ST325A		292							
				m130358		8							
				m131320		13							
				<u>m131957</u>		71				32			
				m132317		200							
D2732-030 *D2732-030* Rubber Cushion - 3"		Manufactured	No			110	Each	252.0000	4	16		DAS 27 9-89	DAS 02 9-89
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				FG		88							
				107346		2							
				117118		22							
				124849		60							
				132003		4							
				ST410		164							
				126146		14							
				<u>133074</u>		150				16			

cut (4) at 3.00" per kit

JUN 10 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Friday, May 29, 2015 11:24:01 AM

Page 2

Work Order ID: 133269

133269

Parent Item: DSI 9410-011

DSI 9410-011

Parent Item Name: Amends Installations Of D350-591-311/312 Steps

Start Date: 6/15/15

Required Date: 7/03/15

Start Qty: 4.00

Required Qty: 4.00

D3595

Manufactured No

110 sf

495.0000 0.0833 1

D3595

Rubber Cushion (\$ Per Ft)

DAS

6
9-89

**

DAS
27
9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

MAT052

495

94539

495

B BOGGS

(D3595-200-300) Cut(2) at 2.00" X 3.00" as per dwg
D3595 (per kit)

MS21042L4

Purchased No

110 Each

5,450.000 32

MS21042L4

Locknut

**

DAS
27
9-89

DAS
02
9-89

JUN 10 2015

Location

Loc Qty

Loc Code

FP001

26

m124231

26

GA

216

m127813

216

ST260a

4062

m130799

56

m131803

6

m132262

1000

m132382

3000

ST305

1146

m128300

8

m130388

7

m130922

97

m131618

12

m132123

1022

30

DAS

6
9-89

Friday, May 29, 2015 11:24:02 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
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LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : _____							

Picklist Print

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133269

Parent Item: DSI 9410-011

DSI 9410-011

Parent Item Name: Amends Installations Of D350-591-311/312 Steps

Start Date: 6/15/15

Required Date: 7/03/15

Start Qty: 4.00

Required Qty: 4.00

NAS1149D0463J

Purchased

No

110

Each

5,215.000

16

64

NAS1149D0463J

WASHER

DAS

27

9-89

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST260a

1739

M132317

1739

ST269

3435

M129682

86

M130799

371

M132035

2978

JUN 10 2015

DAS

02

9-89

DAS

6

9-89

64

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
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Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval																	
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			Completed By																		
			Lead hand / Supervisor Approval Verification																		
			QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																
Past Expiry Date ☐	Manufacturing Process ☐																				
Misidentified ☐	Past Due ☐	OTHER : _____																			

DART SERVICE INSTRUCTION

TO AMEND DRAWING D350-591 REV. F

REF. CANADIAN STC: SH92-6

FAA STC: SH967NE

TO IMPROVE THE FIT OF THE D350-591-311/-312 STEPS, IT IS ACCEPTABLE TO INSTALL THE DSI 9410-011 KIT. INSTALL THE D2732-030 CUSHION (AFT CROSSTUBE) AND D3595-200-300 CUSHION (FWD CROSSTUBE) AS SHOWN IN FIGURE 1 IN PLACE OF THE D2856-400-720 ABRASION STRIP CALLED OUT ON DRAWING D350-591 REV. F.

FOR CUSTOMERS WHO HAVE PREVIOUSLY INSTALLED D2856-400-720 ABRASION STRIPS REMOVE THE ABRASION STRIPS IN ACCORDANCE WITH ICA-D350-591. PRIOR TO INSTALLING THE DSI 9410-011 KIT.

DSI 9410-011 KITS WILL BE INCLUDED WITH D350-591-311/-312 STEPS AT CHANGE 002 AND SUBSEQUENT.

QTY -041	PART NUMBER	DESCRIPTION
X	DSI 9410-011	STEP MODIFICATION KIT
4	D2732-030	CUSHION
2	D3595-200-300	CUSHION
8	AN4-15A	BOLT
16	AN960JD416	WASHER
8	MS21042L4	NUT (OR MS21042-4)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 08.09.08
CERT. NO.: SH92-6
ISSUE NO.: 10

B	SHEET 1 DELETE REVISED P/L. (SEPERATE DSI KIT FROM MAIN KIT SEE NCR 08-082 FOR DETAILS)	AJS	08.09.08
A	NEW ISSUE	PH	08.03.27
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	A	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 1 OF 2
APPROVED	AJS	TITLE	SCALE
DE APPR.	A	STEP MODIFICATION KIT	NTS
DATE	08.09.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

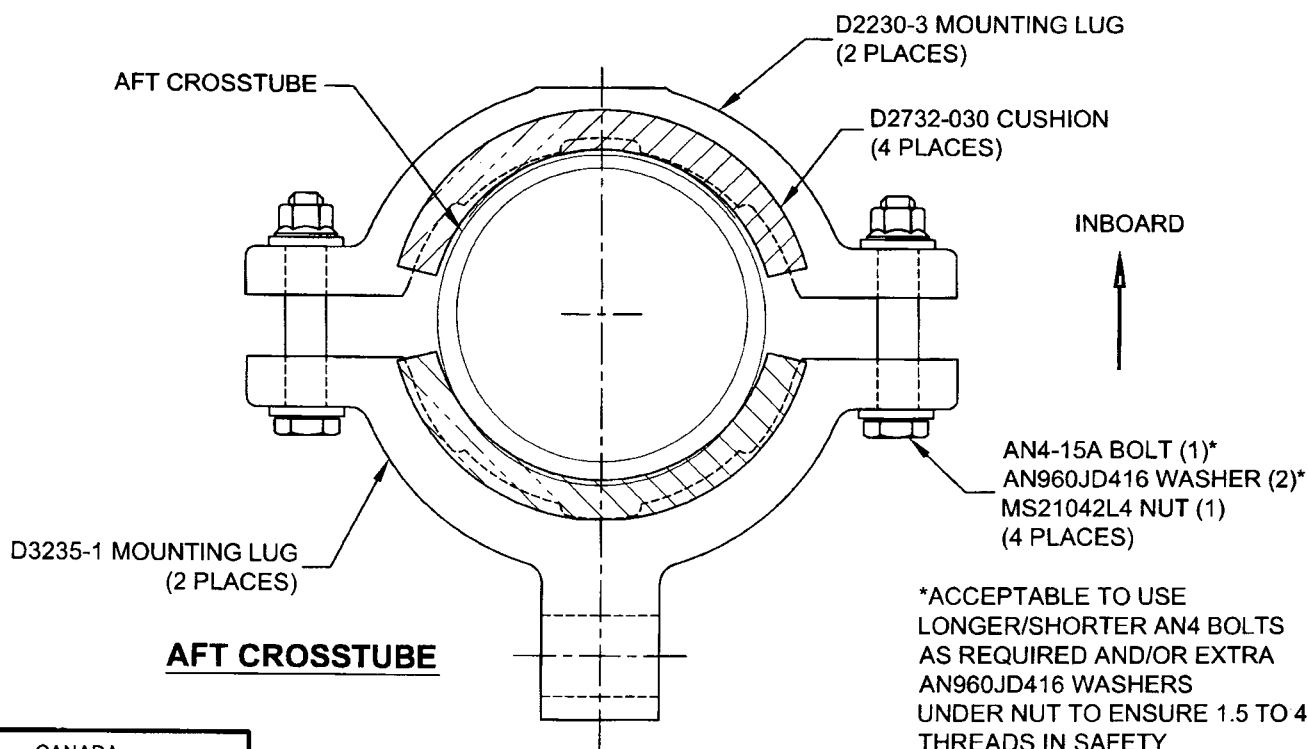
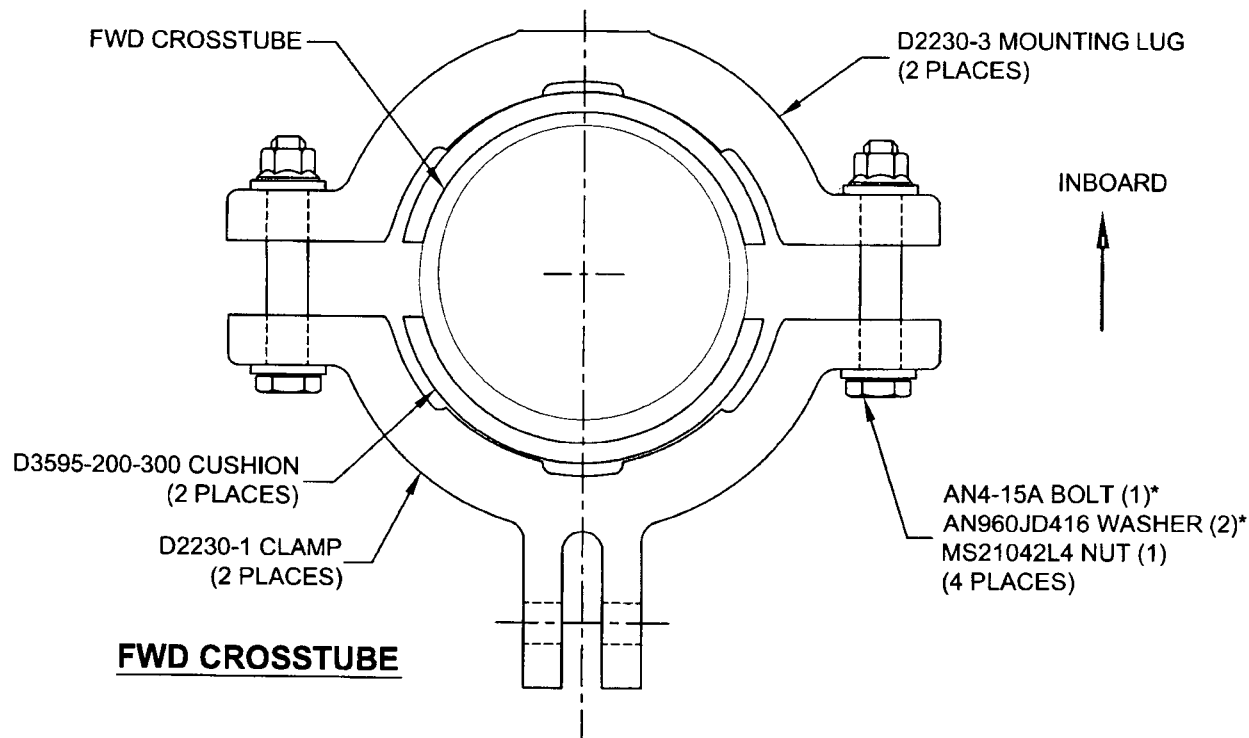


FIGURE 1 - CLAMP/CUSHION INSTALLATION

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 08.09.08
CERT. NO.: SH92-6
ISSUE NO.: 10

DESIGN	<i>AS</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	STEP MODIFICATION KIT	NTS
DATE	08.09.08	COPYRIGHT © 2008 BY DART AEROSPACE LTD	
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DART SERVICE INSTRUCTION

TO AMEND DRAWING D350-591 REV. F

REF. CANADIAN STC: SH92-6

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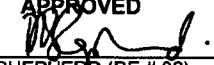
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AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 08.09.08
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DRAWN	AJS		
CHECKED	J	DRAWING NO.	REV. B
MFG. APPR.	N/A	DSI 9410	SHEET 1 OF 2
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DE APPR.	H	STEP MODIFICATION KIT	NTS
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